Minutes, 4/14/04 Tevatron BPM Upgrade Meeting Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

- 1. Report from Steve and Bob.
- 2. Reports from L2 managers.
- 3. Report from Dehong on EchoTek testing.
- 4. AOB.

### 1. Report from Bob and Steve.

- Bob showed a plot (I'll attach as a separate file to doc #792) of the beam position from VA14 and HA15 BPMs using the plan B timing to measure p and pbar positions. The plot shows the p and pbar positions for 12 hours beginning at 10:02 P.M. on 4/13/04. The beam moves during this period and the p's and pbar's move in perfect synchrony. The motion is most likely due to magnet motion and not due to changes in the separators. There was some discussion about the thickness of the lines and what it means as far as timing, filters, synchroton motion, etc.

# 2. Reports from L2 Managers

# Rob Kutschke:

- Rob showed a couple of plots that from data taken on April 8. From the data he has been able to measure resolutions of 11.1 microns for protons and 13.8 for antiprotons. This was done after sorting out some phase information in the antiproton signals. One possibility is that higher frequency components of the signal are aliasing into the measurement. A low-pass filter will be added to the antiproton input to test this hypothesis.
  - Rob's work will be described in a note, doc db #1124.

### Brian Hendricks:

- Brian has responded to comments to the specification document and is waiting to get any responses before the document can be signed off and approved. Those with comments should get them to Brian.

### Margaret Votava:

- Margaret is scheduling a design review for the front-end software. It could happen as early as Thursday April 15.

### Vince Pavlicek:

- Work continues on the timing and diagnostics design.
- The filter specification is being reviewed and will be updated. We agreed to finish the specification by Friday April 23 to allow the system design to proceed.

### Rob Kutschke:

- Rob has been working with Brian and others to refine the offline software specifications. A version 2 will be written and released fairly soon.
- 3. Dehong -- Report about EchoTek testing
- Dehong gave an update on the test plan that is written up as doc #1114. He went through the 5 tests and updated his status on each of them. Next week he will deliver an update including some results from real testing. We all look forward to it.

# Jim Steimel: Technical Coordinator Report

- Jim looked into the possibility of moving some of the components that currently are mounted in the space that we would like to use for the new Tevatron BPM system. The TV screens can probably be moved. THe Tevatron communications system is being used but can also be moved.
- The pbar cables in A3 are candidates for cables that can be connected to the pickups in the tunnel and terminated upstairs as a test.
  - The commissioning plan with effort estimates is being developed.
- Thursday April 15 at 1:30 P.M. the project will continue the commissioning plan discussion.

#### 4. AOB.